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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/583,167	05/25/2007	Jun-Woo Kim	1403-10 PCT US	2581

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EXAMINER
BEDNASH, JOSEPH A

ART UNIT	PAPER NUMBER
2461	

MAIL DATE	DELIVERY MODE
12/01/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Advisory Action ***Before the Filing of an Appeal Brief***	*10/583,167*	KIM ET AL.
	Examiner	**Art Unit**	
	Joey Bednash	2461	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED <u>15 November 2010</u> FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

   a) ☐ The period for reply expires _____months from the mailing date of the final rejection.

   b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

      Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

<u>NOTICE OF APPEAL</u>

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

<u>AMENDMENTS</u>

3. ☒ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will <u>not</u> be entered because

   (a)☒ They raise new issues that would require further consideration and/or search (see NOTE below);

   (b)☐ They raise the issue of new matter (see NOTE below);

   (c)☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or

   (d)☐ They present additional claims without canceling a corresponding number of finally rejected claims.

      NOTE: *See Continuation Sheet.* (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).

5. ☐ Applicant's reply has overcome the following rejection(s): _____.

6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).

7. ☒ For purposes of appeal, the proposed amendment(s): a) ☒ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

   The status of the claim(s) is (or will be) as follows:

   Claim(s) allowed: _____.

   Claim(s) objected to: _____.

   Claim(s) rejected: *1-12*.

   Claim(s) withdrawn from consideration: _____.

<u>AFFIDAVIT OR OTHER EVIDENCE</u>

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will <u>not</u> be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).

9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will <u>not</u> be entered because the affidavit or other evidence failed to overcome <u>all</u> rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).

10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

<u>REQUEST FOR RECONSIDERATION/OTHER</u>

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: <u>See Continuation Sheet.</u>

12. ☐ Note the attached Information *Disclosure Statement*(s). (PTO/SB/08) Paper No(s). _____

13. ☐ Other: _____.

/Joey Bednash/
Examiner, Art Unit 2461

/Jason E Mattis/
Primary Examiner, Art Unit 2461

Continuation of 3. NOTE: The amendments presented for independent claims 1 and 12 with respect to the first data and the second data is a change in the scope of the claims which requires further search and consideration..

Continuation of 11. does NOT place the application in condition for allowance because: Applicant has not provided description of the structure of an apparatus to analyze modulation methods, but has merely recited the act of analyzing modulation methods as a function of the channel decoder. It is examiner's position that AAPA in view of Uesugi fairly discloses the invention of claim 1, and finds the arguments not persuasive. Specifically, given the suggestion in Uesugi that delay can be reduced by demodulating QPSK or 16QAM signals with a 64QAM constellation, and the teaching that one could demodulate 16QAM and QPSK with a 64QAM constellaiton without knowledge of the modulaiton scheme utilised at the transmitter (Para [0074] and [0080]), it would have been obvious to one of ordinary skill in the art to modify the receiver taught by AAPA such that channels could be demodulated prior to analyzing the downlink MAP information using the maximum modulaiton ratio (64QAM). Moreover, given that a 64QAM demappnig process would result in more bits of information (i.e. 6-bits) that actually transmitted for 16 QAM and QPSK (4 and 2 bits repectively), it would have been obvious to one of ordinary skill in the art that analyzing the downlink MAP as taught by AAPA could be one possible way to determine the number of useful bits of information (i.e. 2, 4 or 6) contained in the bits resulting from the 64QAM demapping process of QPSK, 16QAM or 64QAM symbols. Applicant's arguments also refer to "Walton" as not teaching the claimed limitations. Examiner respectfully submits that no references to "Walton" were made of record or applied as prior art in rejection of the claims. With respect to arguments presented regarding AAPA para 10, examiner cited para 10 and 13 from AAPA to teacht the limitation of "reading valid data from the data stored in the slot buffer, based on the analyzed modulation methods for each sub channels and demodulating the valid data, and outputting the demodulated data." The cited portions of AAPA disclose a channel decoder that analyzes the MAP information in order to understand the contents for the demapping process. Since data that has been demapped and stored in the slot buffer (as described by AAPA) cannot be demapped until the decoder analyzes the contents of the MAP message in order to "understand the contents for the QAM demapping process", it is examiner's position that data that is stored in the slot buffer is "valid data". Furthermore, the data that results from the acts of demapping, storing in the slot buffer, and reading (the already valid data) from the slot buffer as described by AAPA result in demodulated data which is then output from the decoder. Examiner respectfully advises applicant that "demodulation" is generally considered by those of ordinary skill in the art to be the act performed in the demapper of AAPA, as well as the demapper 74 of Fig. 10 which "performs a demapping process to subchannels by a modulaiton method using a maximum modulaiton ratio" as described by applicants (Para [57]), and the data that is read from the slot buffer has already been demodulated. It appears that the channel decoder merely reads the valid, already demodulated data, from the slot buffers based on the analyzed modulation methods and while the data output from the channel decoder is the demodulated data the act of demodulating the data is actually that which is performed by the demapper.